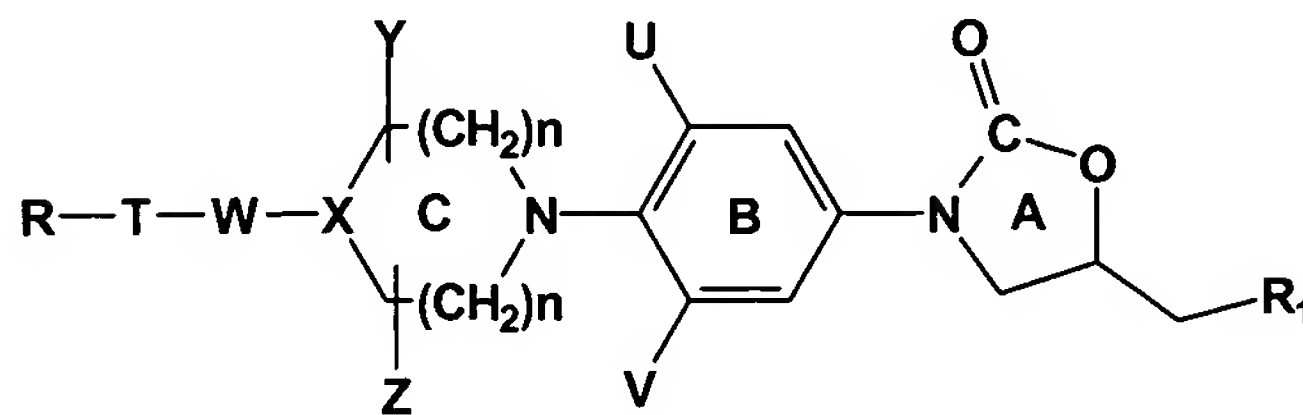


1 1. (Original) Compounds having the structure of Formula 1:



5 **Formula I**

6 and their pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters,  
7 enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein

8 **T** is a five to seven membered heterocyclic ring, substituted heterocyclic ring, aryl or  
9 substituted aryl, bound to the ring **C** with a linker **W**, and further substituted by a group  
10 represented by **R**, wherein **R** is H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>,R<sub>7</sub>),  
11 NHCOC(R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -  
12 C=CH-R<sub>5</sub>, OR<sub>5</sub>, SR<sub>5</sub>, -C(R<sub>9</sub>)=C(R<sub>9</sub>)NO<sub>2</sub>, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl,  
13 Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is hydrogen, alkoxy, aryl, heteroaryl, amines, substituted  
14 amines, alkene substituted with aryl, heteroaryl or halogen; R<sub>5</sub> is H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub>  
15 cycloalkyl, C<sub>1-6</sub> alkoxy, aryl, heteroaryl or C<sub>1-6</sub> alkyl substituted with one or more of F,  
16 Cl, Br, I or OH;

17 R<sub>6</sub> and R<sub>7</sub> are independently H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>  
18 alkoxy;

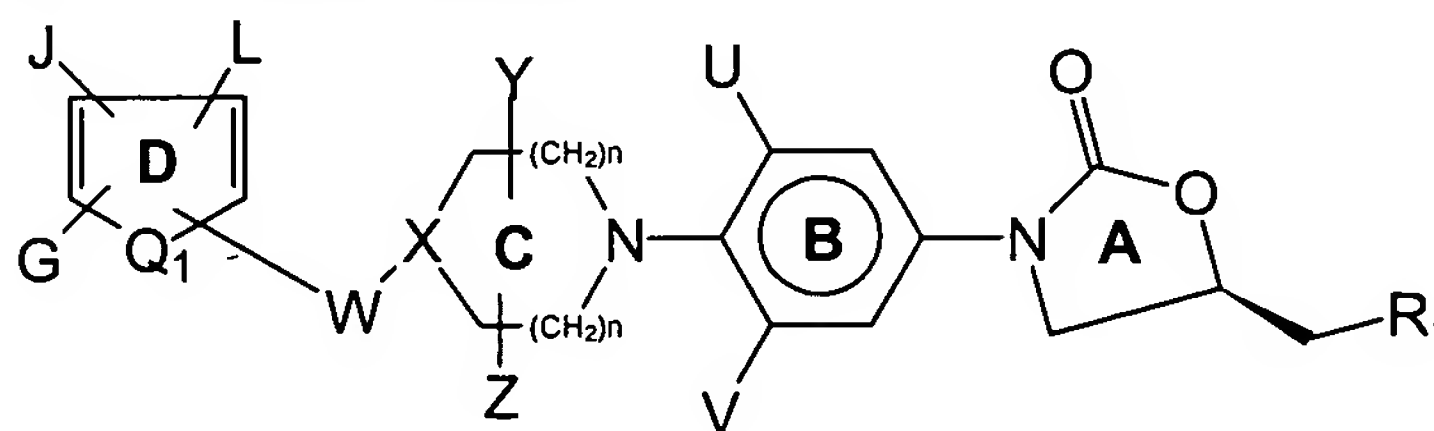
19 R<sub>8</sub> and R<sub>9</sub> are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl substituted with one or  
20 more of F, Cl, Br, I, OR<sub>5</sub>, SR<sub>4</sub>, or N(R<sub>6</sub>,R<sub>7</sub>);

21 R<sub>10</sub>= H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or  
22 heteroaryl;

23 **n** is an integer in the range from 0 to 3;

- 24 **X** is H, CH, CH-S, CH-O, N, CHNR<sub>11</sub> or CCH<sub>2</sub>NR<sub>11</sub>, wherein R<sub>11</sub> is hydrogen, optionally  
 25 substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub>  
 26 alkylcarboxy, aryl or heteroaryl;
- 27 **Y** and **Z** are independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>0-3</sub> bridging groups;
- 28 **U** and **V** are independently hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub>  
 29 alkyl substituted with one or more of F, Cl, Br, I;
- 30 **W** is CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N (R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-,  
 31 CH(R<sub>11</sub>), S, CH<sub>2</sub>(CO), NH, O, NR<sub>11</sub>, (CO)CH<sub>2</sub>, N(R<sub>11</sub>)CON(R<sub>11</sub>), N(R<sub>11</sub>)C(=S)N(R<sub>11</sub>),  
 32 SO<sub>2</sub> or SO, wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl,  
 33 C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkylcarboxy, aryl or heteroaryl; and
- 34 R<sub>1</sub> is NHC(=O)R<sub>2</sub>, NHC(=S)R<sub>2</sub>, N(R<sub>3</sub>, R<sub>4</sub>), NR<sub>3</sub> or OR<sub>3</sub>, wherein R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> are  
 35 independently hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaroyl,  
 36 heterocyclic, aralkyl, aralkenyl, wherein the heteroaryl and heterocyclic rings may contain  
 37 one or more heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and  
 38 aralkenyl rings may be unsubstituted or substituted with one or more of alkyl, halogen,  
 39 nitro, amino or methylenedioxy.

1 2. (Original) Compounds having the structure of Formula II:

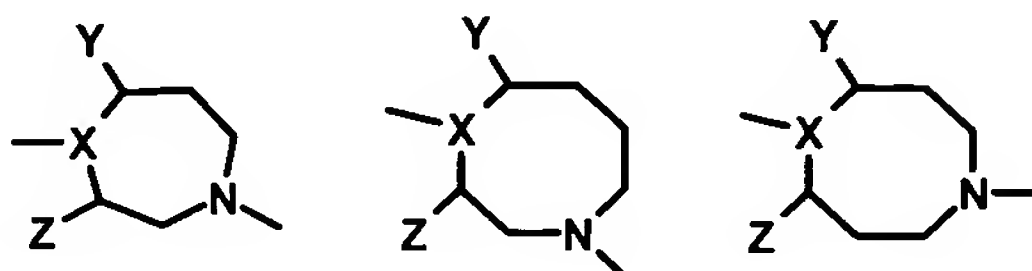


5 **Formula II**

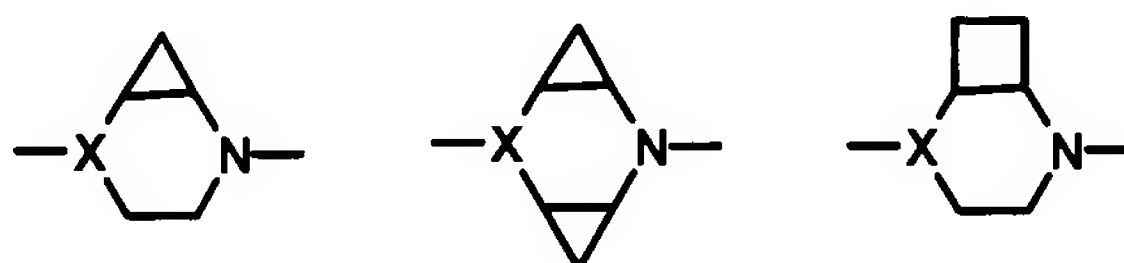
- 6 and their pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters,  
 7 enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein
- 8 R<sub>1</sub> is NHC(=O)R<sub>2</sub>, NHC(=S)R<sub>2</sub>, N(R<sub>3</sub>, R<sub>4</sub>), NR<sub>3</sub> or OR<sub>3</sub>, wherein R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> are  
 9 independently hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaroyl,  
 10 heterocyclic, aralkyl, aralkenyl, wherein the heteroaryl and heterocyclic rings may contain

- 11 one or more heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and  
 12 aralkenyl rings may be unsubstituted or substituted with one or more of alkyl, halogen,  
 13 nitro, amino or methylenedioxy;
- 14 U and V are independently hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub>  
 15 alkyl substituted with one or more of F, Cl, Br, I;
- 16 Y and Z are independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>0-3</sub> bridging group;
- 17 X is H, CH, CH-S, CH-O, N, CHNR<sub>11</sub> or CCH<sub>2</sub>NR<sub>11</sub>, wherein R<sub>11</sub> is hydrogen, optionally  
 18 substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl carbonyl, C<sub>1-6</sub>  
 19 alkylcarboxy, aryl or heteroaryl;
- 20 W is CH<sub>2</sub>, C=O, CH<sub>2</sub>NH, NHCH<sub>2</sub>, CH<sub>2</sub>NHCH<sub>2</sub>, CH<sub>2</sub>N(R<sub>11</sub>)CH<sub>2</sub>, CH<sub>2</sub>N(R<sub>11</sub>), CH(R<sub>11</sub>),  
 21 S, CH<sub>2</sub>(C=O), NH, O, (CO)CH<sub>2</sub>, N(R<sub>11</sub>)CON(R<sub>11</sub>), SO<sub>2</sub>, SO, NR<sub>11</sub>, N(R<sub>11</sub>)C(=S)N(R<sub>11</sub>);  
 22 wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy,  
 23 C<sub>1-6</sub> alkyl carbonyl, C<sub>1-6</sub> alkylcarboxy, aryl or heteroaryl;
- 24 n is an integer in the range from 0 to 3;
- 25 Q<sub>1</sub> is O, S or NR<sub>11</sub>, wherein R<sub>11</sub> is as defined above;
- 26 G, J, L are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>,R<sub>7</sub>),  
 27 NHCOC(R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -  
 28 C=CH-R<sub>5</sub>, OR<sub>5</sub>, SR<sub>5</sub>, -C(R<sub>9</sub>)=C(R<sub>9</sub>)NO<sub>2</sub>, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl,  
 29 Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is as defined above; R<sub>5</sub> is H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>  
 30 alkoxy, aryl or heteroaryl; C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH;
- 31 R<sub>6</sub> and R<sub>7</sub> are independently H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl or C<sub>1-6</sub>  
 32 alkoxy;
- 33 R<sub>8</sub> and R<sub>9</sub> are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl substituted with one or  
 34 more of F, Cl, Br, I, OR<sub>5</sub>, SR<sub>4</sub>, N(R<sub>6</sub>,R<sub>7</sub>); and
- 35 R<sub>10</sub>= H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or  
 36 heteroaryl.

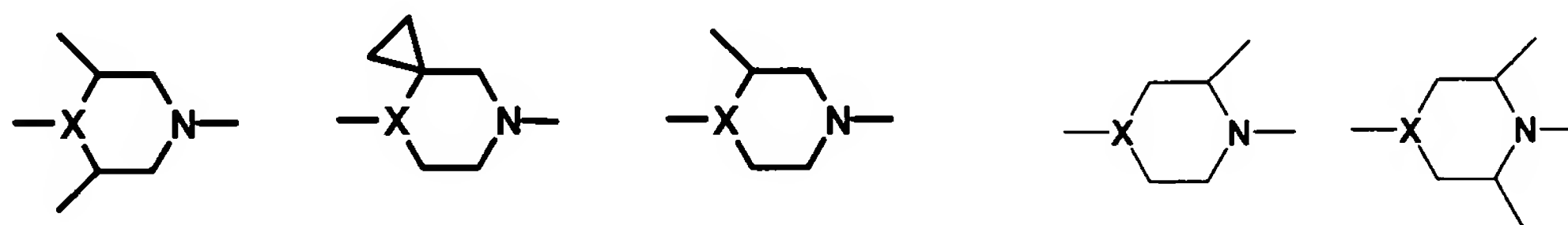
- 1 3. (Original) The compound according to claim 2 wherein in Formula II, ring C  
 2 is 6-8 membered in size and the ring may have either two or three carbon atoms between  
 3 each nitrogen atom comprising of:



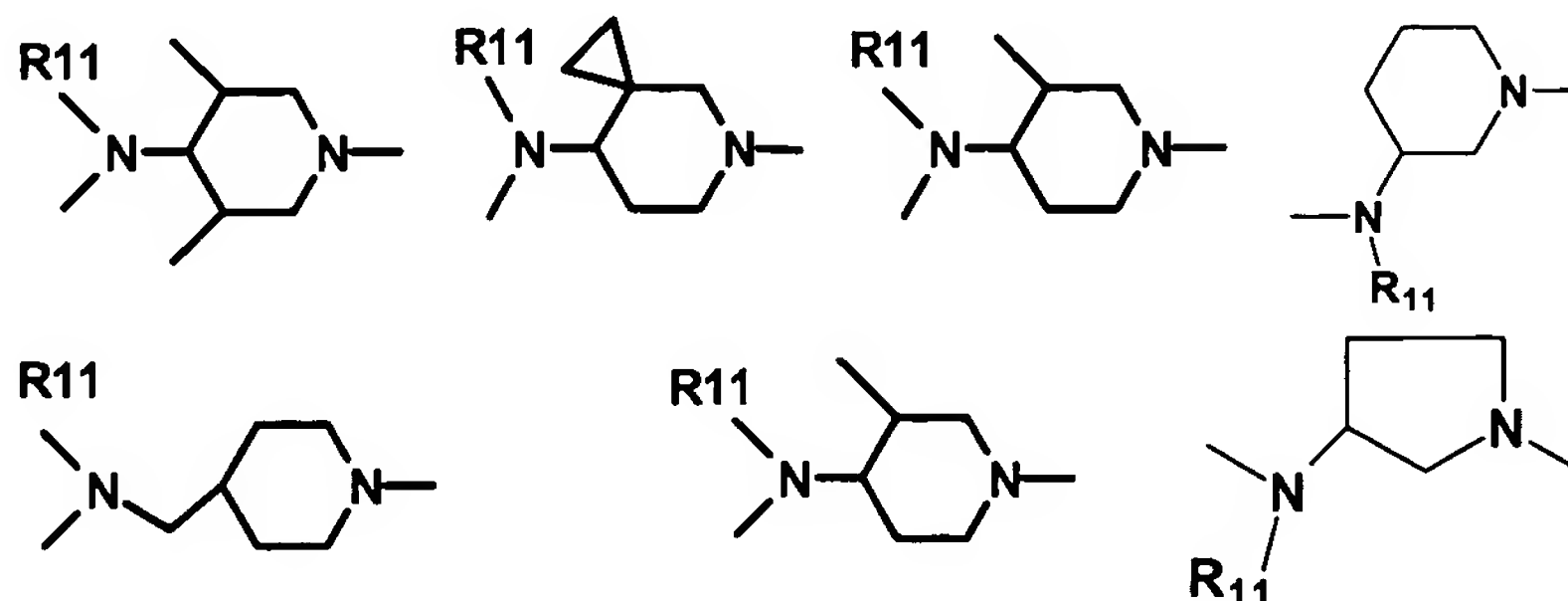
- 6 and the ring C may be bridged to form a bicyclic system as shown below:



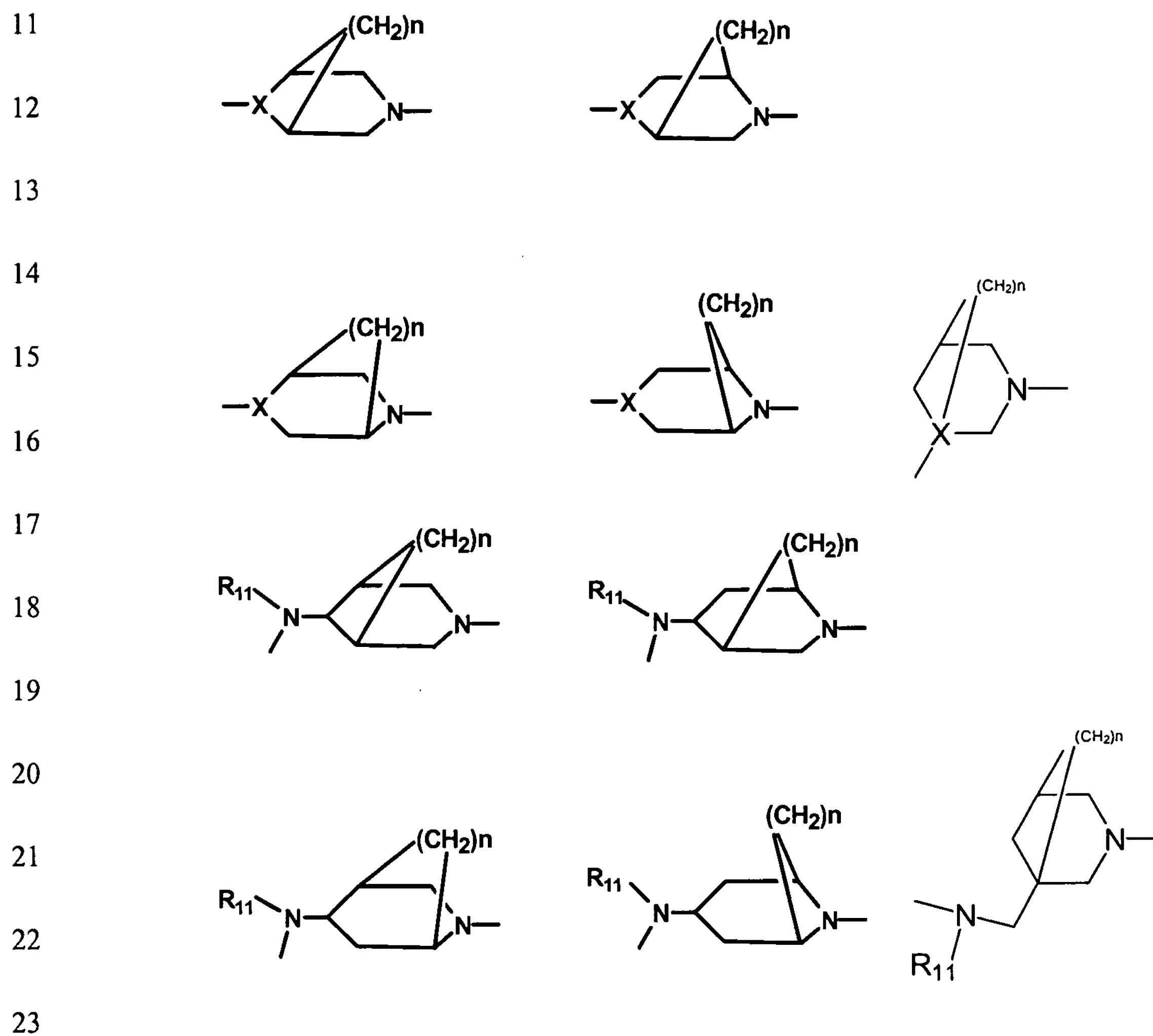
- 1 4. (Original) The compound according to claim 2 wherein in Formula II, ring C  
 2 is substituted at positions Y and Z with alkyl groups, cycloalkyl groups, fluoro group,  
 3 carboxylic and corresponding esters, amides, substituted alkyls or bridging alkyl groups as  
 4 shown below:



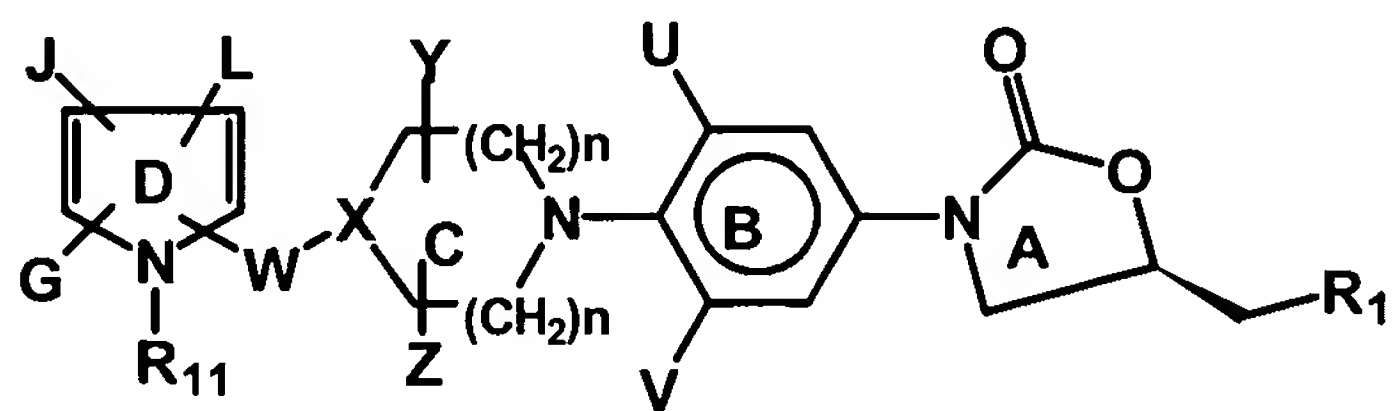
- 2 5. (Original) The compound according to claim 2 wherein in Formula II, ring C  
 3 is 6 membered in size and X is  $-\text{CH}-(\text{NHR}_{11})$ , or  $>\text{CCH}_2\text{NHR}_{11}-$ , the ring C is selected  
 4 from the group consisting of the following rings wherein  $\text{R}_{11}$  is the same as defined  
 5 earlier,



10 or in addition to the above, the ring C includes the following structures:



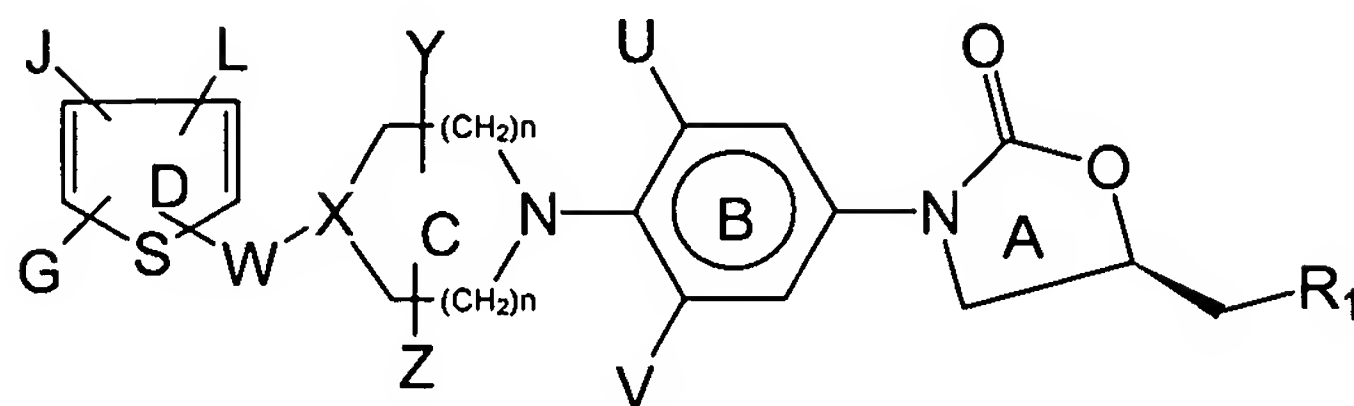
1 6. (Original) The compound according to claim 2 having the structure of  
 2 Formula III:



6 **Formula III**

7 wherein U, V, Y, Z, X, W, G, J, L, R<sub>1</sub>, R<sub>11</sub> and n are as defined earlier.

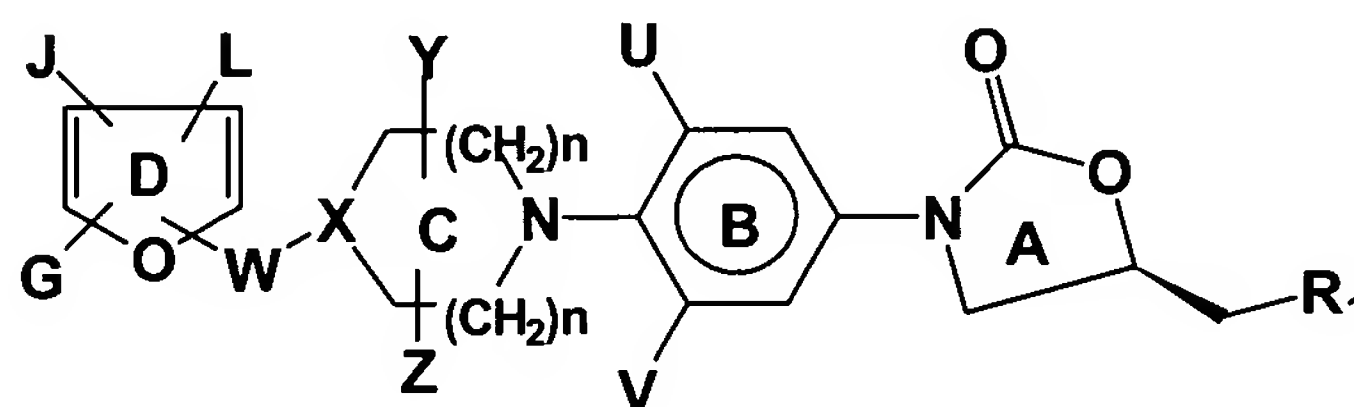
- 1 7. (Original) The compound according to claim 2 having the structure of  
2 Formula IV:



6 **Formula IV**

7 wherein U, V, Y, Z, X, W, G, J, L, R<sub>1</sub> and n are as defined earlier.

- 1 8. (Original) The compound according to claim 2 having the structure of  
2 Formula V:



6 **Formula V**

7 wherein U, V, X, Y, Z, W, G, J, L, R<sub>1</sub> and n are as defined earlier.

- 1 9. (Original) A compound selected from the group consisting of :

- 2 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
3 oxo-5-oxazolidinyl]methyl]-3-(2,4-dichlorophenyl)acrylamide (Compound No. 1)  
4 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
5 oxo-5-oxazolidinyl]methyl]-3-(4-fluorophenyl)acrylamide (Compound No. 2)  
6 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
7 oxo-5-oxazolidinyl]methyl]-2-benzo(b)furanamide (Compound No. 3)  
8 (S)-N-[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
9 oxo-5-oxazolidinyl]methylamine (Compound No. 4)

- 10 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
11 oxo-5-oxazolidinyl)methyl]-3-(phenyl)acrylamide (Compound No. 5)
- 12 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
13 oxo-5-oxazolidinyl)methyl]-3-(1,3-benzodioxol-5-yl)acrylamide (Compound No.  
14 6)
- 15 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}] piperazinyl] phenyl]-  
16 2-oxo-5-oxazolidinyl)methyl]-3-(4-fluorophenyl)acrylamide (Compound No. 7)
- 17 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}] piperazinyl] phenyl]-  
18 2-oxo-5-oxazolidinyl)methyl]-3-(4-nitrophenyl)acrylamide (Compound No. 8)
- 19 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}] piperazinyl] phenyl]-  
20 2-oxo-5-oxazolidinyl)methyl]-3-(2,4-dichlorophenyl)acrylamide (Compound  
21 No.9)
- 22 (S)-N-[1-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-  
23 2-oxo-5-oxazolidinyl)methyl]]-thiourea (Compound No. 10)
- 24 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}]piperazinyl]phenyl]-2-  
25 oxo-5-oxazolidinyl)methyl]isothiocyanate (Compound No. 11)
- 26 (S)-N-[1-[[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}] piperazinyl]  
27 phenyl]-2-oxo-5-oxazolidinyl)methyl]]-thiourea (Compound No. 12)
- 28 (S)-N-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-2-  
29 oxo-5-oxazolidinyl)methyl]isothiocyanate (Compound No. 13)
- 30 5(S)-Isoxazol-3-yl-oxymethyl-3-[3-fluoro-4-[4-[(4-bromo-5-nitro-2-thienyl)  
31 methyl]piperazinyl-1-yl]phenyl]oxazolidin-2-one (Compound No. 14)
- 32 5(S)-Isoxazol-3-yl-oxymethyl-3-[3-fluoro-4-[4-[(5-nitro-2-furyl)methyl]  
33 piperazinyl-1-yl]phenyl]oxazolidin-2-one (Compound No. 15)
- 34 5(S)-Isoxazol-3-yl-oxymethyl-3-[3-fluoro-4-[4-[(5-nitro-2-thienyl)  
35 methyl]piperazinyl-1-yl]phenyl]oxazolidin-2-one (Compound No. 16)

36 (S)-N-[1-[[3-[3-Fluoro-4-[N-1-[4-{2-furyl-(5-nitro)methyl}] piperazinyl] phenyl]-  
37 2-oxo-5-oxazolidinyl]methyl]]3,3-dimethyl-thiourea (Compound No. 17)

38 (S)-N-[3-[3-Fluoro-4-[N-1-[4-{2-thienyl-(5-nitro)methyl}] piperazinyl]  
39 phenyl]-2-oxo-5-oxazolidinyl]methylamine (Compound No. 18)

1 10. (Original) A pharmaceutical composition comprising the compound of claims  
2 1, 2 or 9 and a pharmaceutical acceptable carrier.

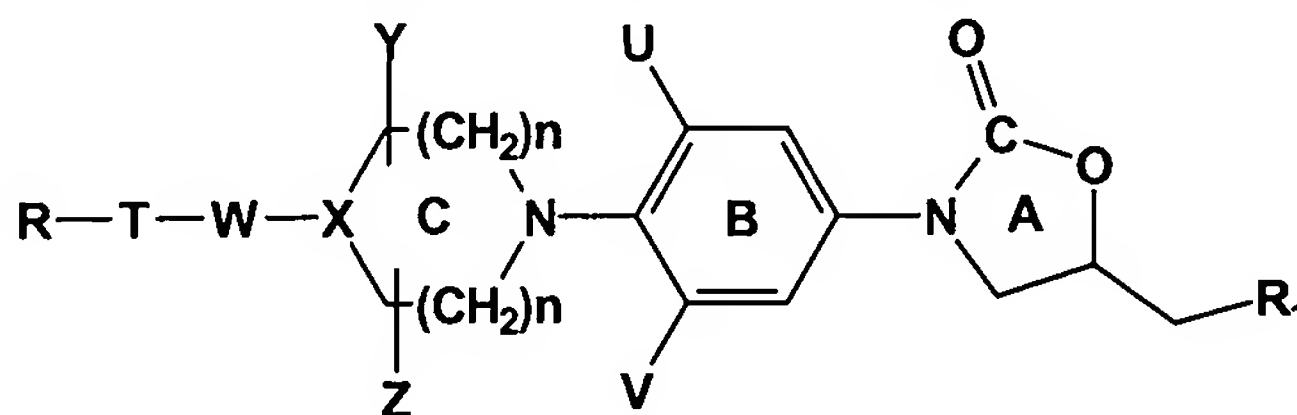
1 11. (Original) A pharmaceutical composition comprising a pharmaceutically  
2 effective amount of compound according to claims 1, 2 or 9 or a physiologically  
3 acceptable acid addition salt thereof with a pharmaceutical acceptable carrier for treating  
4 microbial infections.

1 12. (Original) A method of treating or preventing microbial infections in a  
2 mammal comprising administering to the said mammal, the pharmaceutical composition  
3 according to claim 11.

1 13. (Original) The method according to claim 12 wherein the microbial infections  
2 are caused by gram-positive and gram-negative bacteria.

1 14. (Cancelled).

1 15. (Original) A method of treating or preventing aerobic and anaerobic bacterial  
2 infections in a mammal comprising administering to said mammal, a therapeutically  
3 effective amount of a compound having the structure of Formula I



7 **Formula I**

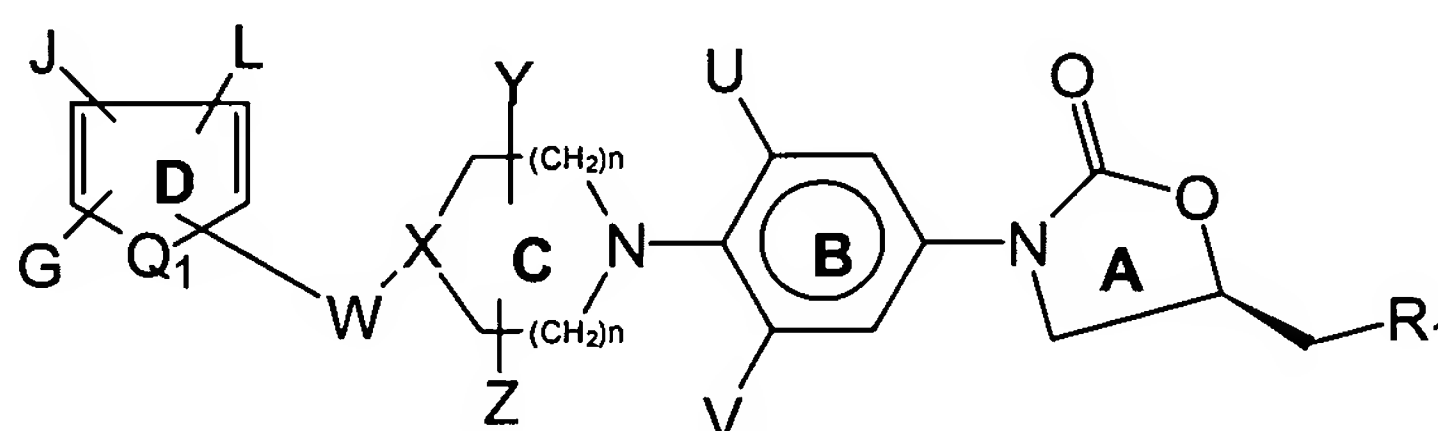
8 and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters,  
9 enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein



- 10 T is a five to seven membered heterocyclic ring, substituted heterocyclic ring, aryl or  
 11 substituted aryl, bound to the ring C with a linker W, and is further substituted by a group  
 12 represented by R, wherein R is H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>,R<sub>7</sub>),  
 13 NHCO(R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -  
 14 C=CH-R<sub>5</sub>, OR<sub>5</sub>, SR<sub>5</sub>, -C(R<sub>9</sub>)=C(R<sub>9</sub>)NO<sub>2</sub>, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl,  
 15 Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is hydrogen, alkoxy, aryl, heteroaryl, amines, substituted  
 16 amines, alkene substituted with aryl, heteroaryl or halogens; R<sub>5</sub> is H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub>  
 17 cycloalkyl, C<sub>1-6</sub> alkoxy, aryl or heteroaryl; C<sub>1-6</sub> alkyl substituted with one or more of F,  
 18 Cl, Br, I or OH;
- 19 R<sub>6</sub> and R<sub>7</sub> are independently H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>  
 20 alkoxy;
- 21 R<sub>8</sub> and R<sub>9</sub> are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl substituted with one or  
 22 more of F, Cl, Br, I, OR<sub>5</sub>, SR<sub>4</sub>, or N(R<sub>6</sub>,R<sub>7</sub>);
- 23 R<sub>10</sub>= H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or  
 24 heteroaryl;
- 25 n is an integer in the range from 0 to 3;
- 26 X is H, CH, CH-S, CH-O, N, CHNR<sub>11</sub> or CCH<sub>2</sub>NR<sub>11</sub>, wherein R<sub>11</sub> is hydrogen, optionally  
 27 substituted C<sub>1-12</sub> alkyl C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub>  
 28 alkylcarboxy, aryl or heteroaryl;
- 29 Y and Z are independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>0-3</sub> bridging groups;
- 30 U and V are independently hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub>  
 31 alkyl substituted with one or more of F, Cl, Br, I;
- 32 W is CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N (R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-,  
 33 CH(R<sub>11</sub>), S, CH<sub>2</sub>(CO), NH, O, NR<sub>11</sub>, (CO)CH<sub>2</sub>, N(R<sub>11</sub>)CON(R<sub>11</sub>), N(R<sub>11</sub>)C(=S)N(R<sub>11</sub>),  
 34 SO<sub>2</sub> or SO; wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl,  
 35 C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkylcarboxy, aryl or heteroaryl; and

36  $R_1$  is  $\text{NHC}(=\text{O})R_2$ ,  $\text{NHC}(=\text{S})R_2$ ,  $\text{N}(R_3, R_4)$ ,  $\text{NR}_3$  or  $\text{OR}_3$ , wherein  $R_2$ ,  $R_3$ ,  $R_4$  are  
 37 independently hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaryl,  
 38 heterocyclic, aralkyl, aralkenyl, wherein the heteroaryl and heterocyclic rings may contain  
 39 one or more heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and  
 40 aralkenyl rings may be unsubstituted or substituted with one or more of alkyl, halogen,  
 41 nitro, amino or methylenedioxy.

1 16. (Original) A method of treating or preventing aerobic and anaerobic bacterial  
 2 infections in a mammal comprising administering to said mammal, a therapeutically  
 3 effective amount of a compound having the structure of Formula II:



7 **Formula II**

8 and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters,  
 9 enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein

10  $R_1$  is  $\text{NHC}(=\text{O})R_2$ ,  $\text{NHC}(=\text{S})R_2$ ,  $\text{N}(R_3, R_4)$ ,  $\text{NR}_3$  or  $\text{OR}_3$ , wherein  $R_2$ ,  $R_3$ ,  $R_4$  are  
 11 independently hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaryl,  
 12 heterocyclic, aralkyl, aralkenyl, wherein the heteroaryl and heterocyclic rings may contain  
 13 one or more of heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and  
 14 aralkenyl rings may be unsubstituted or substituted with one or more of alkyl, halogen,  
 15 nitro, amino or methylenedioxy;

16 U and V are independently hydrogen, optionally substituted  $\text{C}_{1-6}$  alkyl, F, Cl, Br, I,  $\text{C}_{1-12}$   
 17 alkyl substituted with one or more of F, Cl, Br, I;

18 Y and Z are independently hydrogen,  $\text{C}_{1-6}$  alkyl,  $\text{C}_{3-12}$  cycloalkyl,  $\text{C}_{0-3}$  bridging group;

19 X is H, CH, CH-S, CH-O, N,  $\text{CHNR}_{11}$  or  $\text{CCH}_2\text{NR}_{11}$ , wherein  $R_{11}$  is hydrogen, optionally  
 20 substituted  $\text{C}_{1-12}$  alkyl,  $\text{C}_{3-12}$  cycloalkyl,  $\text{C}_{1-6}$  alkoxy,  $\text{C}_{1-6}$  alkyl carbonyl,  $\text{C}_{1-6}$   
 21 alkylcarboxy, aryl or heteroaryl;

22 W is CH<sub>2</sub>, C=O, CH<sub>2</sub>NH, NHCH<sub>2</sub>, CH<sub>2</sub>NHCH<sub>2</sub>, CH<sub>2</sub>N(R<sub>11</sub>)CH<sub>2</sub>, CH<sub>2</sub>N(R<sub>11</sub>),  
 23 CH(R<sub>11</sub>), S, CH<sub>2</sub>(C=O), NH, O, (CO)CH<sub>2</sub>, N(R<sub>11</sub>)CON(R<sub>11</sub>), SO<sub>2</sub>, SO, NR<sub>11</sub>,  
 24 N(R<sub>11</sub>)C(=S)N(R<sub>11</sub>); wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub>  
 25 cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl carbonyl, C<sub>1-6</sub> alkylcarboxy, aryl or heteroaryl;

26 n is an integer in the range from 0 to 3;

27 Q<sub>1</sub> is O, S or NR<sub>11</sub>, wherein R<sub>11</sub> is as defined earlier;

28 G, J, L are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>,R<sub>7</sub>),  
 29 NHCOC(R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -  
 30 C=CH-R<sub>5</sub>, OR<sub>5</sub>, SR<sub>5</sub>, -C(R<sub>9</sub>)=C(R<sub>9</sub>)NO<sub>2</sub>, C<sub>1-12</sub> alkyl substituted with one or more F, Cl,  
 31 Br, I, OR<sub>4</sub>, SR<sub>4</sub>, wherein R<sub>4</sub> is as defined above; R<sub>5</sub> is H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>  
 32 alkoxy, aryl or heteroaryl; C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH;

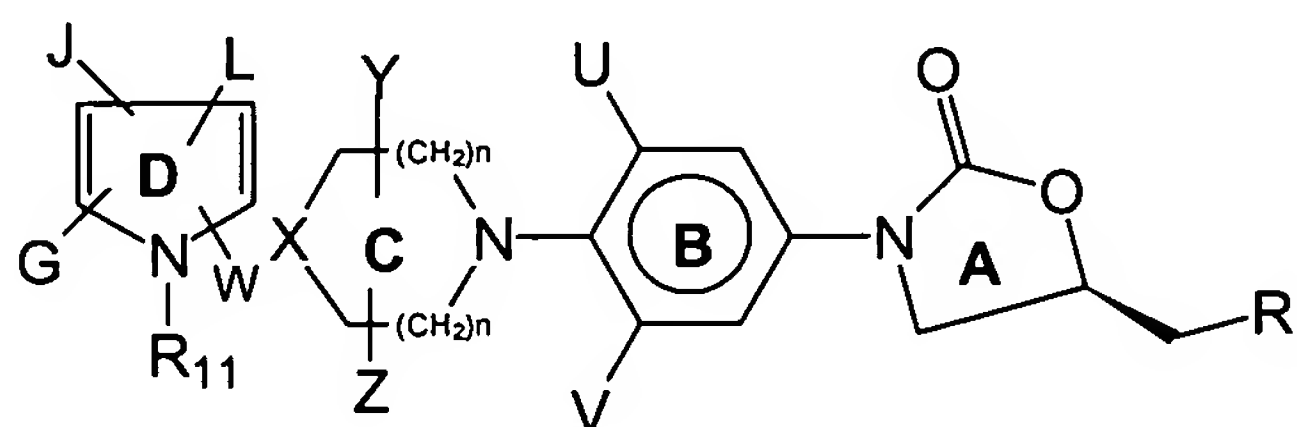
33 R<sub>6</sub> and R<sub>7</sub> are independently H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl or C<sub>1-6</sub>  
 34 alkoxy;

35 R<sub>8</sub> and R<sub>9</sub> are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl substituted with one or  
 36 more of F, Cl, Br, I, OR<sub>5</sub>, SR<sub>4</sub>, N(R<sub>6</sub>,R<sub>7</sub>); and

37 R<sub>10</sub>= H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or  
 38 heteroaryl.

1 17. - 19. (Cancelled)

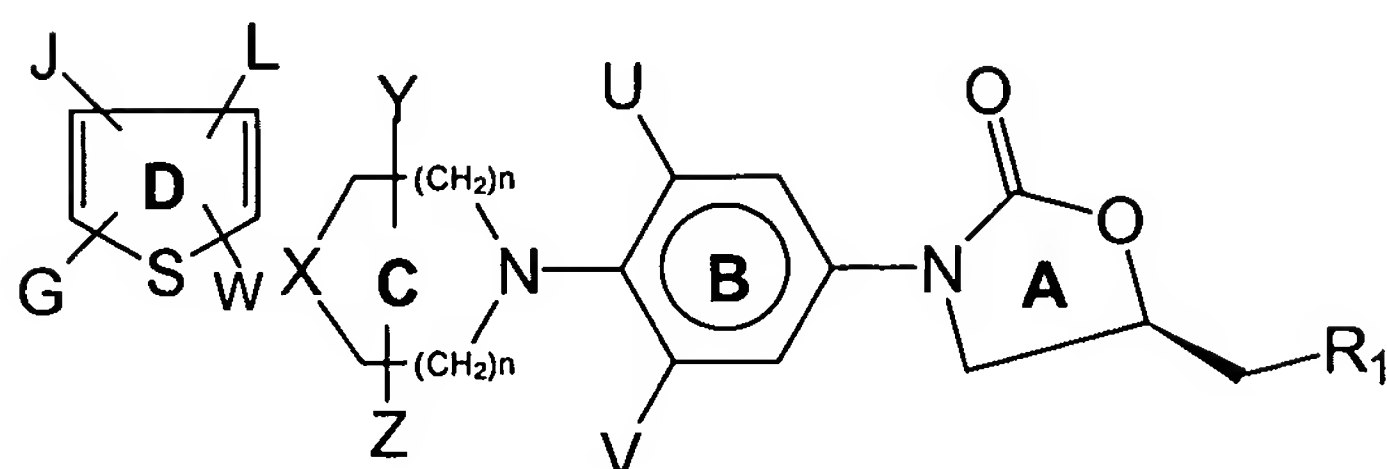
2 20. (Original) The method according to claim 16 having the structure of Formula  
 3 , III,



7 **FORMULA III**

8 wherein U, V, Y, Z, W, X, G, J, L, R<sub>1</sub>, R<sub>11</sub> and n are as defined earlier.

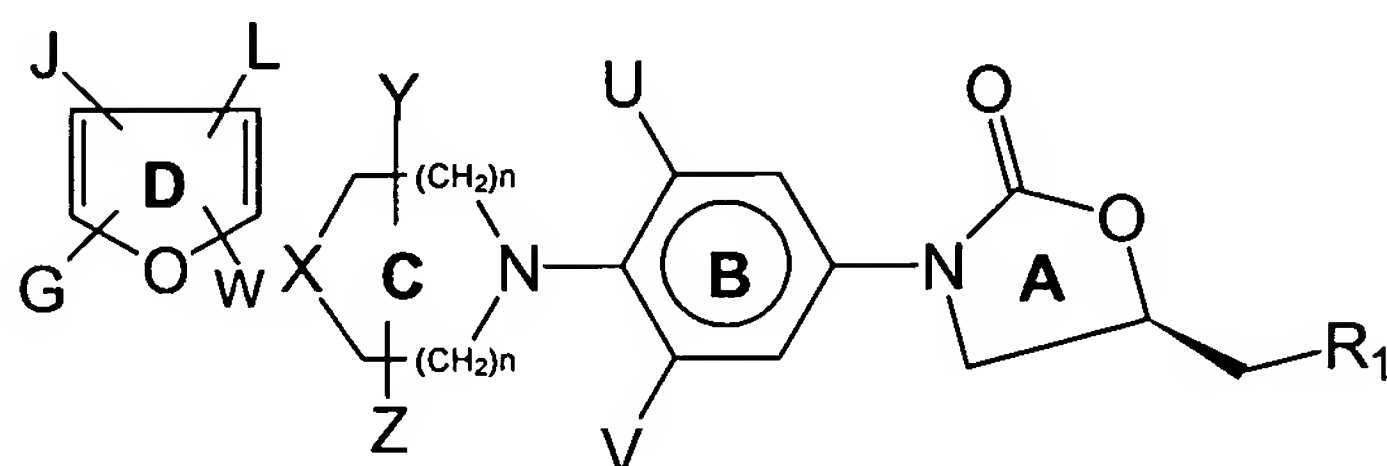
21. (Original) The method according to claim 16 having the structure of Formula IV,



**FORMULA IV**

wherein U, V, Y, Z, W, X, G, J, L, R<sub>1</sub> and n are as defined earlier.

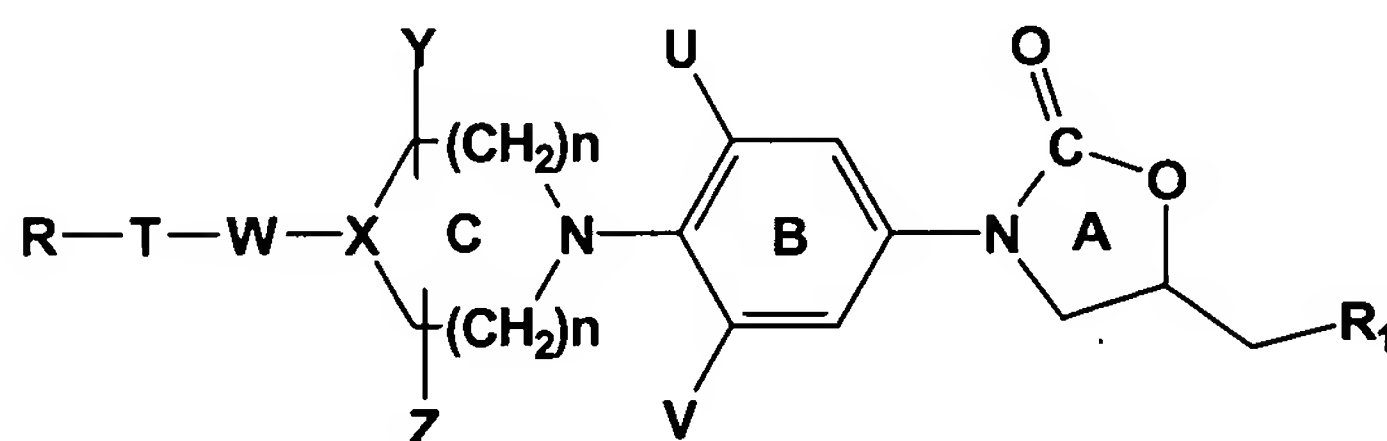
22. (Original) The method according to claim 16 having the structure of Formula V,



**FORMULA V**

wherein U, V, X, Y, Z, W, G, J, L, R<sub>1</sub> and n are as defined earlier.

23. (Original) A process for preparing a compound of Formula I,



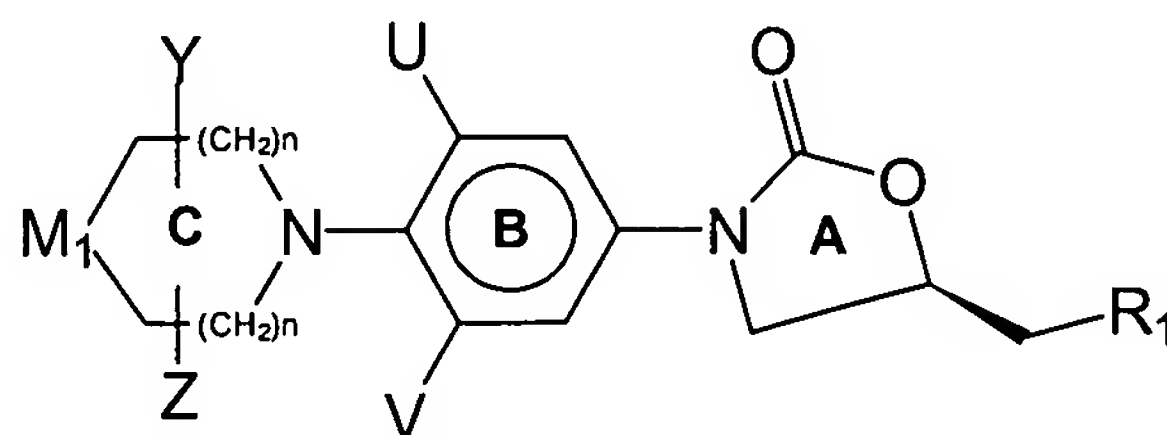
**Formula I**

and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein

- 1 T is a five to seven membered heterocyclic ring, substituted heterocyclic ring, aryl or  
 2 substituted aryl, bound to the ring C with a linker W, and is further substituted by a group  
 3 represented by R, wherein R is H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, -CN, COR<sub>5</sub>, COOR<sub>5</sub>, N(R<sub>6</sub>,R<sub>7</sub>),  
 4 NHCO(R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>), CON(R<sub>6</sub>, R<sub>7</sub>), CH<sub>2</sub>NO<sub>2</sub>, NO<sub>2</sub>, CH<sub>2</sub>R<sub>8</sub>, CHR<sub>9</sub>, -CH = N-OR<sub>10</sub>, -C=CH-  
 5 R<sub>5</sub>, OR<sub>5</sub>, SR<sub>5</sub>, -C(R<sub>9</sub>)=C(R<sub>9</sub>)NO<sub>2</sub>, C<sub>1-12</sub> alkyl substituted with one or more of F, Cl, Br, I, OR<sub>4</sub>,  
 6 SR<sub>4</sub>, wherein R<sub>4</sub> is hydrogen, alkoxy, aryl, heteroaryl, amines, substituted amines, alkene  
 7 substituted with aryl, heteroaryl or halogens; R<sub>5</sub> is H, C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy,  
 8 aryl or heteroaryl; C<sub>1-6</sub> alkyl substituted with one or more of F, Cl, Br, I or OH;
- 9 R<sub>6</sub> and R<sub>7</sub> are independently H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub>  
 10 alkoxy;
- 11 R<sub>8</sub> and R<sub>9</sub> are independently H, C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl substituted with one or more  
 12 of F, Cl, Br, I, OR<sub>5</sub>, SR<sub>4</sub>, or N(R<sub>6</sub>,R<sub>7</sub>);
- 13 R<sub>10</sub>= H, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, aryl or  
 14 heteroaryl;
- 15 n is an integer in the range from 0 to 3;
- 16 X is H, CH, CH-S, CH-O, N, CHNR<sub>11</sub> or CCH<sub>2</sub>NR<sub>11</sub>, wherein R<sub>11</sub> is hydrogen, optionally  
 17 substituted C<sub>1-12</sub> alkyl C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub> alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub>  
 18 alkylcarboxy, aryl or heteroaryl;
- 19 Y and Z are independently hydrogen, C<sub>1-6</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>0-3</sub> bridging groups;
- 20 U and V are independently hydrogen, optionally substituted C<sub>1-6</sub> alkyl, F, Cl, Br, I, C<sub>1-12</sub> alkyl  
 21 substituted with one or more of F, Cl, Br, I;
- 22 W is CH<sub>2</sub>, CO, CH<sub>2</sub>NH, -NHCH<sub>2</sub>, -CH<sub>2</sub>NHCH<sub>2</sub>, -CH<sub>2</sub>-N (R<sub>11</sub>)CH<sub>2</sub>-, CH<sub>2</sub>(R<sub>11</sub>)N-, CH(R<sub>11</sub>), S,  
 23 CH<sub>2</sub>(CO), NH, O, NR<sub>11</sub>, (CO)CH<sub>2</sub>, N(R<sub>11</sub>)CON(R<sub>11</sub>), N(R<sub>11</sub>)C(=S)N(R<sub>11</sub>), SO<sub>2</sub> or SO;  
 24 wherein R<sub>11</sub> is hydrogen, optionally substituted C<sub>1-12</sub> alkyl, C<sub>3-12</sub> cycloalkyl, C<sub>1-6</sub> alkoxy, C<sub>1-6</sub>  
 25 alkyl, C<sub>1-6</sub> alkylcarbonyl, C<sub>1-6</sub> alkylcarboxy, aryl or heteroaryl; and

$R_1$  is  $\text{NHC}(=\text{O})R_2$ ,  $\text{NHC}(=\text{S})R_2$ ,  $\text{N}(R_3, R_4)$ ,  $\text{NR}_3$  or  $\text{OR}_3$ , wherein  $R_2$ ,  $R_3$ ,  $R_4$  are independently hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaroyl, heterocyclic, aralkyl, aralkenyl, wherein the heteroaryl and heterocyclic rings may contain one or more heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and aralkenyl rings may be unsubstituted or substituted with one or more of alkyl, halogen, nitro, amino or methylenedioxy;

which comprises reacting an amine of Formula VI,

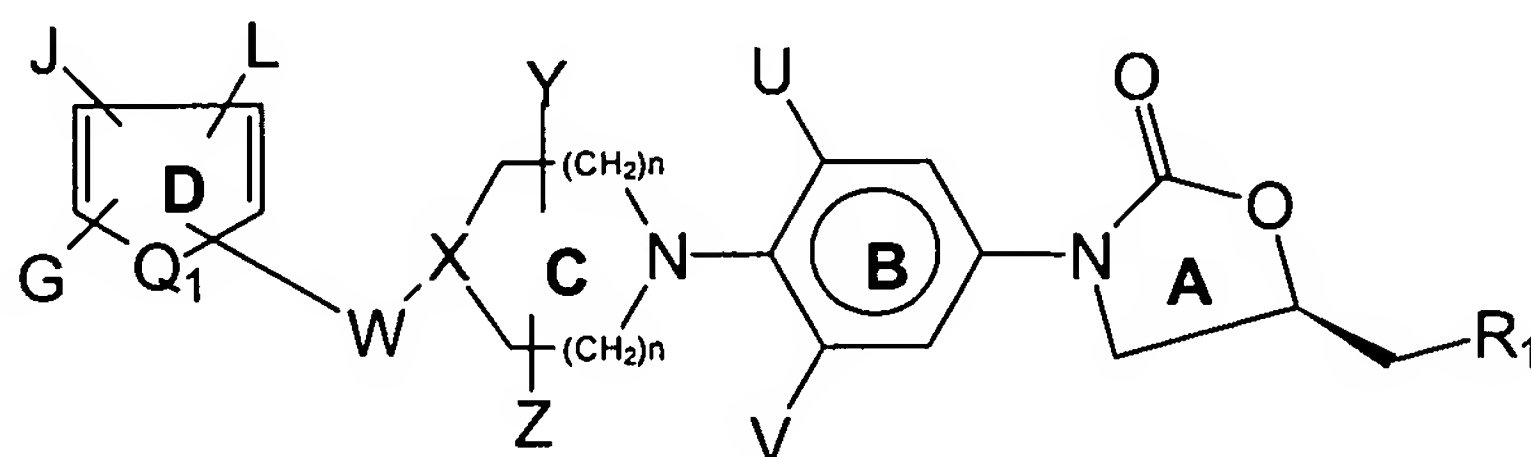


**Formula VI**

with a heteroaromatic compound of Formula R-T-W- $R_{12}$  wherein R, T, W,  $R_1$ , Y, Z, U, V and n are as defined earlier and  $M_1$  is NH,  $\text{NHR}_{13}$ ,  $\text{CHNHR}_{13}$ ,  $-\text{CHCH}_2\text{NHR}_{13}$ ,  $-\text{CCH}_2\text{NHR}_{13}$ , wherein  $R_{13}$  is H, ethyl, methyl, isopropyl, acetyl, cyclopropyl, alkoxy or acetyl and  $R_{12}$  is a suitable leaving group selected from the group consisting of fluoro, chloro, bromo, iodo,  $\text{SCH}_3$ ,  $-\text{SO}_2\text{CH}_3$ ,  $-\text{SO}_2\text{CF}_3$ , Tos,  $\text{OC}_6\text{H}_5$ ,  $-\text{COOH}$  or  $-\text{CHO}$ .

24. (Cancelled).

25. (Original) A process for preparing a compound of Formula II,



**Formula II**

and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, N-oxides, polymorphs, prodrugs or metabolites, wherein

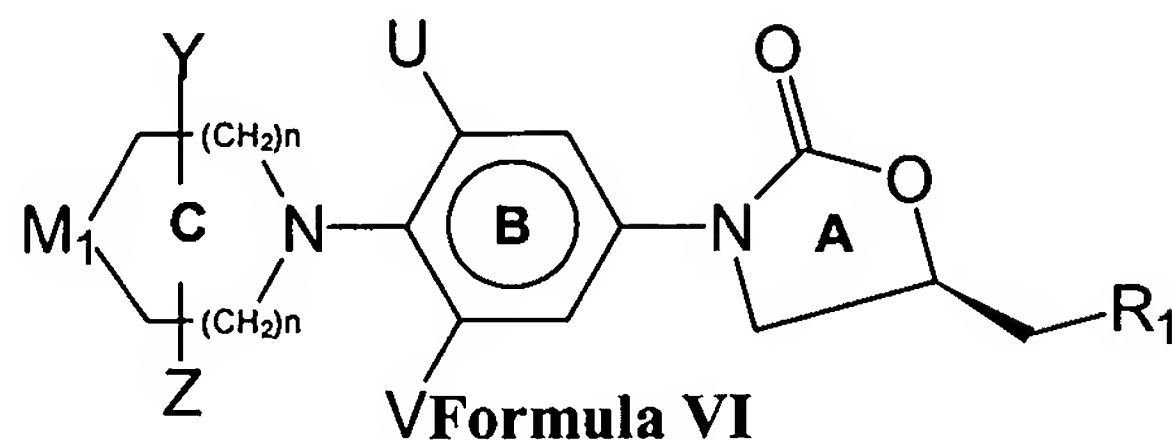
- 1  $R_1$  is  $NHC(=O)R_2$ ,  $NHC(=S)R_2$ ,  $N(R_3, R_4)$ ,  $NR_3$  or  $OR_3$ , wherein  $R_2$ ,  $R_3$ ,  $R_4$  are independently  
2 hydrogen, thiocarbonyl, amines, substituted amines, aryl heteroaroyl, heterocyclic, aralkyl,  
3 aralkenyl, wherein the heteroaryl and heterocyclic rings may contain one or more of  
4 heteroatoms selected from O, S and N; the aryl, heteroaryl, aralkyl and aralkenyl rings may be  
5 unsubstituted or substituted with one or more of alkyl, halogen, nitro, amino or  
6 methylenedioxy;
- 7  $U$  and  $V$  are independently hydrogen, optionally substituted  $C_{1-6}$  alkyl, F, Cl, Br, I,  $C_{1-12}$  alkyl  
8 substituted with one or more F, Cl, Br, I;
- 9  $Y$  and  $Z$  are independently hydrogen,  $C_{1-6}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{0-3}$  bridging group;
- 10  $X$  is H, CH, CH-S, CH-O, N,  $CHNR_{11}$  or  $CCH_2NR_{11}$ , wherein  $R_{11}$  is hydrogen, optionally  
11 substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkyl carbonyl,  $C_{1-6}$  alkylcarboxy,  
12 aryl or heteroaryl;
- 13  $W$  is  $CH_2$ ,  $C=O$ ,  $CH_2NH$ ,  $NHCH_2$ ,  $CH_2NHCH_2$ ,  $CH_2N(R_{11})CH_2$ ,  $CH_2N(R_{11})$ ,  $CH(R_{11})$ , S,  
14  $CH_2(C=O)$ , NH, O,  $(CO)CH_2$ ,  $N(R_{11})CON(R_{11})$ ,  $SO_2$ , SO,  $NR_{11}$ ,  $N(R_{11})C(=S)N(R_{11})$ ;  
15 wherein  $R_{11}$  is hydrogen, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$   
16 alkyl carbonyl,  $C_{1-6}$  alkylcarboxy, aryl or heteroaryl;
- 17  $n$  is an integer in the range from 0 to 3;
- 18  $Q_1$  is O, S or  $NR_{11}$ , wherein  $R_{11}$  is as defined earlier;
- 19  $G$ ,  $J$ ,  $L$  are independently H,  $C_{1-6}$  alkyl, F, Cl, Br, I,  $-CN$ ,  $COR_5$ ,  $COOR_5$ ,  $N(R_6, R_7)$ ,  
20  $NHCOC(R_8, R_9, R_{10})$ ,  $CON(R_6, R_7)$ ,  $CH_2NO_2$ ,  $NO_2$ ,  $CH_2R_8$ ,  $CHR_9$ ,  $-CH = N-OR_{10}$ ,  $-C=CH-$   
21  $R_5$ ,  $OR_5$ ,  $SR_5$ ,  $-C(R_9)=C(R_9)NO_2$ ,  $C_{1-12}$  alkyl substituted with one or more F, Cl, Br, I,  $OR_4$ ,  
22  $SR_4$ , wherein  $R_4$  is as defined above;  $R_5$  is H,  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy, aryl or  
23 heteroaryl;  $C_{1-6}$  alkyl substituted with one or more of F, Cl, Br, I or OH;
- 24  $R_6$  and  $R_7$  are independently H, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl or  $C_{1-6}$   
25 alkoxy;



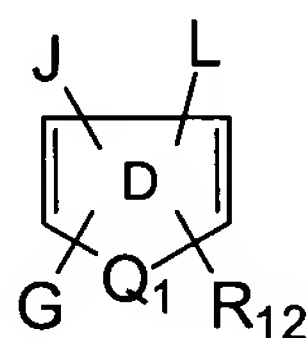
1  $R_8$  and  $R_9$  are independently H,  $C_{1-6}$  alkyl, F, Cl, Br, I,  $C_{1-12}$  alkyl substituted with one or more  
 2 of F, Cl, Br, I,  $OR_5$ ,  $SR_4$ ,  $N(R_6, R_7)$ ; and

3  $R_{10}$  = H, optionally substituted  $C_{1-12}$  alkyl,  $C_{3-12}$  cycloalkyl,  $C_{1-6}$  alkoxy,  $C_{1-6}$  alkyl, aryl or  
 4 heteroaryl;

5 comprising reacting a compound of Formula VI,



9 with a heteroaromatic compound of Formula VII,



12

13 wherein  $R_1$ , U, V, Y, Z, G, J, L and  $Q_1$  are as defined earlier and  $M_1$  is NH,  $NHR_{13}$ ,  
 14  $CHNHR_{13}$ ,  $-CHCH_2NHR_{13}$ ,  $-CCH_2NHR_{13}$ , wherein  $R_{13}$  is H, ethyl, methyl, isopropyl, acetyl,  
 15 cyclopropyl, alkoxy or acetyl and  $R_{12}$  is a suitable leaving group selected from the group  
 16 consisting of fluoro, chloro, bromo, iodo,  $SCH_3$ ,  $-SO_2CH_3$ ,  $-SO_2CF_3$ , Tos,  $OC_6H_5$ ,  $-COOH$  or  
 17  $-CHO$ .

1 26.-41. (Cancelled)